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PMC

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**1: M69043. Homo sapiens MAD-...[gi:187290]**

Links

**LOCUS** HUMMAD3A 1550 bp mRNA linear PRI 07-MAR-1994  
**DEFINITION** Homo sapiens MAD-3 mRNA encoding I<sub>k</sub>B-like activity, complete cds.  
**ACCESSION** M69043  
**VERSION** M69043.1 GI:187290  
**KEYWORDS**  
**SOURCE** Homo sapiens (human)  
**ORGANISM** Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
**REFERENCE** 1 (bases 1 to 1550)  
**AUTHORS** Haskill,S., Beg,A.A., Tompkins,S.M., Morris,J.S., Yurochko,A.D.,  
Sampson-Johannes,A., Mondal,K., Ralph,P. and Baldwin,A.S. Jr.  
**TITLE** Characterization of an immediate-early gene induced in adherent  
monocytes that encodes I kappa B-like activity  
**JOURNAL** Cell 65 (7), 1281-1289 (1991)  
**MEDLINE** 91292530  
**PUBMED** 1829648  
**COMMENT** Original source text: Homo sapiens cDNA to mRNA.  
**FEATURES**  
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**CDS** 95..1048  
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**misc\_feature** 1346..1350  
/gene="MAD3"  
/note="attta motif"  
**misc\_feature** 1525..1529  
/gene="MAD3"

Practitioner's Docke . MPI96-031CP1DV1CPACN1M 10/052,005

## Exhibit A

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polyA\_site 1550

/gene="MAD3"

BASE COUNT 380 a 402 c 416 g 352 t

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May 20 2003 11:20:12



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PMC

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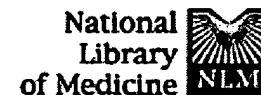
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## Revision history for "M69043"

GI	Version	Update Date	Status
187290	1	Mar 7 1994 17:00	Live
187290	1	Jul 26 1993 19:32	Dead
187290	1	Apr 27 1993 12:57	Dead

Accession M69043 was first seen at NCBI on Apr 27 1993 12:57

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FREE full text article at  
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access FREE full text articles**Mutual regulation of the transcriptional activator NF-kappa B and its inhibitor, I kappa B-alpha.****Brown K, Park S, Kanno T, Franzoso G, Siebenlist U.**

Laboratory of Immunoregulation, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD 20892.

The NF-kappa B transcription factor complex is sequestered in the cytoplasm by the inhibitory protein I kappa B-alpha (MAD-3). Various cellular stimuli relieve this inhibition by mechanisms largely unknown, leading to NF-kappa B nuclear localization and transactivation of its target genes. It is demonstrated here with human T lymphocytes and monocytes that different stimuli, including tumor necrosis factor alpha and phorbol 12-myristate 13-acetate, cause rapid degradation of I kappa B-alpha, with concomitant activation of NF-kappa B, followed by a dramatic increase in I kappa B-alpha mRNA and protein synthesis. Transfection studies reveal that the I kappa B-alpha mRNA and the encoded protein are potently induced by NF-kappa B and by homodimers of p65 and of c-Rel. We propose a model in which NF-kappa B and I kappa B-alpha mutually regulate each other in a cycle: saturating amounts of the inhibitory I kappa B-alpha protein are destroyed upon stimulation, allowing rapid activation of NF-kappa B. Subsequently, I kappa B-alpha mRNA and protein levels are quickly induced by the activated NF-kappa B. This resurgence of I kappa B-alpha protein acts to restore an equilibrium in which NF-kappa B is again inhibited.

PMID: 8460169 [PubMed - indexed for MEDLINE]

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